



Los Alamos National Laboratory TRU Waste Management at Area G Fact Sheet



CAMPAIGN NAME:
TRU Waste Management at Area G

LOCATION:
Area G, which covers 63 acres, lies inside Technical Area 54 at Los Alamos National Laboratory

PROJECT ACTIVITIES:
Store, remediate and ship LANL's above-ground transuranic waste to the Waste Isolation Pilot Plant

PROJECT GOAL:
Ensure contaminated waste from past LANL operations do not threaten human and environmental health

ESTIMATED COMPLETION:
After 2028

HISTORY

Technical Area 54 (TA-54) is Los Alamos National Laboratory's (LANL) legacy waste management area. Opened in 1957, Area G is a site within TA-54 that contains past radioactive waste disposal areas. This area includes 32 pits, 194 shafts, and four trenches with depths ranging from 10 to 65 feet below the original ground surface. Area G is now dedicated to storing, characterizing, and remediating LANL's transuranic (TRU) and low-level waste to ship it offsite for permanent disposal.

NOVEMBER 2020 STATUS

- N3B began shipping from the Radioassay and Nondestructive Testing (RANT) facility
- The RANT facility allows N3B to load TRU waste trucks in inclement weather, thereby increasing shipments to WIPP

TRU WASTE

TRU waste is radioactive waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years. Transuranic elements are those greater than uranium on the Periodic Table of Elements. All TRU waste at LANL is "contact-handled," meaning it can be safely handled directly by workers using protection.

SAFETY SYSTEMS

The TRU waste containers are stored in domes equipped with fire detection and air monitoring systems. The containers are routinely monitored and inspected. TRU waste from LANL's past defense-related activities is intended to be disposed deep underground at the Department of Energy's Waste Isolation Pilot Plant (WIPP) in southeastern New Mexico. Prior to shipment, the containers and their contents are independently, non-destructively analyzed and certified under a state- and Environmental Protection Agency-approved program to confirm that containers meet the WIPP Waste Acceptance Criteria.

SHIPPING WASTE OFFSITE

Mobile loading capabilities are fully operational at Area G, enabling TRU waste to be shipped to WIPP, weather and schedule permitting. TRU waste containers destined for WIPP—such as drums, standard waste boxes, and 10-drum overpacks—are secured inside robust shipping casks that have met strict Nuclear Regulatory Commission (NRC) requirements and testing under extreme conditions.

WIPP WASTE ACCEPTANCE CRITERIA

LANL and other generator sites must comply with criteria regulating the storage, transportation, and disposal of contact handled TRU waste at WIPP. The requirements are implemented and verified to ensure that waste management and disposal adequately protect human health and the environment.

BY THE NUMBERS

3,500

Containers of above-ground TRU waste to be removed from Area G

67

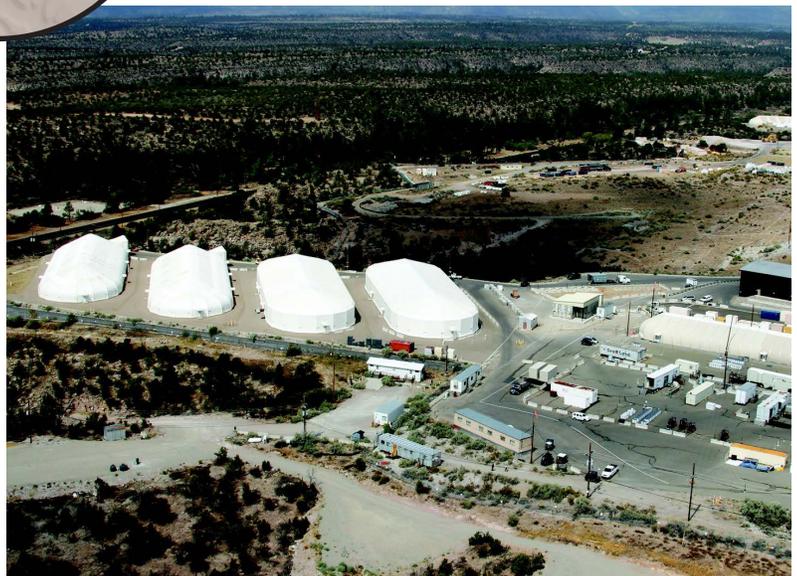
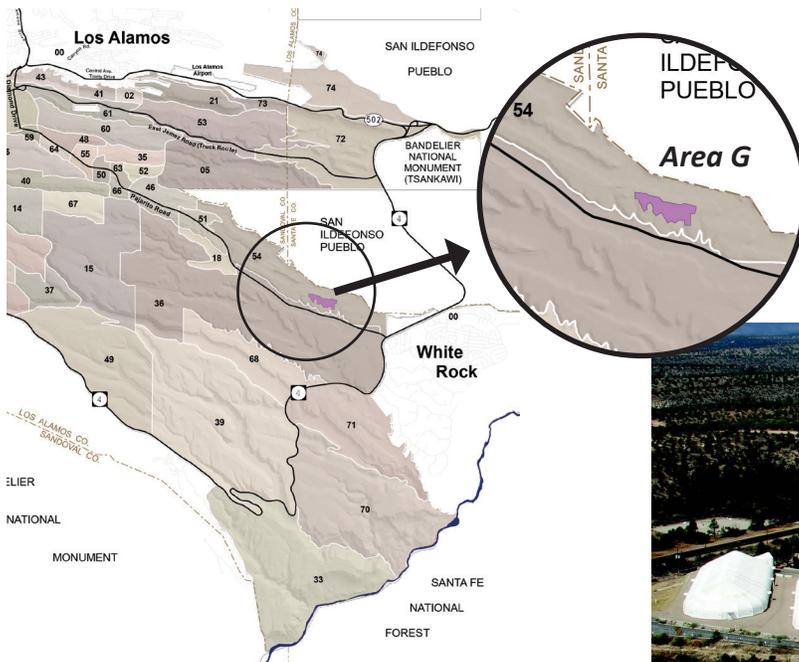
Projected number of shipments to WIPP from October 2020 through April 2023

~500

Estimated number of shipments to complete the Area G TRU waste shipping campaign

OTHER ACTIVITIES

Other waste management activities at Area G unrelated to the current TRU campaign include removal and remediation of suspected TRU waste from below-grade pits, shafts, and trenches. Work at Area G also includes preparing mixed low-level waste and low-level waste for transport to offsite disposal facilities.



Waste Storage Domes at Area G

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